

SOUTH AFRICAN RADIO LEAGUE

SARL NEWS SUNDAY 07 MARCH 2004

You are listening to Amateur Radio Station ZS6SRL of the South African Radio League, the National society for Amateur Radio in South Africa, with a news bulletin that is broadcast every Sunday at 08:15 Central Africa Time (CAT) in Afrikaans and at 08:30 CAT in English.

In order to try and achieve better coverage this bulletin will also be relayed on 10,130 MHz as regularly as possible. Reception reports on this frequency will be appreciated.

This bulletin is also available on the website of the SARL at www.sarl.org.za and on packet bulletin boards.

In the news today:

NEW VERSION OF WSJT RELEASED

SPECIAL STATION AT THE TSHWANE UNIVERSITY OF TECHNOLOGY SCIENCE EXPO

DISCOVERING AMATEUR RADIO

SARL CONTESTS

Stay tuned for more detail on these and other news items.

Visit the SARL Web site or call the SARL office which is open on weekdays from 09:00 to 13:00 at 011 675 2393 for details on how to join, book sales and all related amateur radio activities.

SARL NEWS invites clubs and individuals to submit news items of interest to amateurs on the web site of the SARL, which is www.sarl.org.za/newsinbox.asp not later than the Thursday preceding the bulletin date. It would be appreciated if you could do it in both Afrikaans and English.

You are listening to ZS6SRL.

The news follows in detail.

NEW VERSION OF WSJT RELEASED

Joe Taylor K1JT has released the latest version of his WSJT software suite. Version 4.5.0 was released on Thursday 4 March 2004, and includes a more powerful decoder for JT65, and new modes FSK441B and FSK441C with FEC features.

The JT65 modes employ an entirely new decoding algorithm that uses “soft decisions” to recover the transmitted message. The message format and Reed-Solomon encoding are unchanged, so the JT65A, B, and C modes are fully compatible with earlier versions. However, the new decoder is more sensitive by slightly more than 1 dB. It is based on software licensed from CodeVector

Technologies, LLC, and protected under United States Patent 6,634,007. As usual, however, WSJT is freely available for amateur radio use.

Changes to the JT65 modes are “under the hood,” and except for the improved performance you will find them mostly invisible. The new decoder can be somewhat slower than the one in v4.3.4, depending on details of the received data. Like JT65, FSK441 now provides three submodes. FSK441A is identical to the “classical” FSK441. The two new modes, FSK441B and FSK441C, use the same 4-tone frequency shift keying at 441 baud. However, they use forward error correction (FEC) on a character-by-character basis, to improve message reliability. They also provide shorthand messages which are more robust than the single-tone messages of traditional FSK441. Cross-mode communication will not work: a transmission in FSK441B must be received in FSK441B, etc.

With multi-tone messages the sensitivities of the three submodes are nearly the same, but they have different trade-offs. Mode A is 25 percent faster than mode B, but mode B is more accurate and will produce much less on-screen “gibberish”. Mode C is about half the speed of mode A but has still stronger FEC code. Parameters of the B and C modes were selected in the expectation that FSK441B might become the mode of choice for meteor scatter work on 144 MHz, while FSK441C will likely prove best at 50 MHz where the pings are longer. These suppositions need to be tested, of course.

Experienced WSJT users should have no difficulty making the new modes work. Just select the desired mode from the Mode menu (or use the appropriate hot-key combination), and away you go.

The software can be downloaded from K1JT’s website (<http://pulsar.princeton.edu/~joe/K1JT/>) or from the PEARS website at <http://www.qsl.net/zs2pe> under the VHF section. Utility files and setup documentation can also be found on the PEARS website. A South African activity period is being planned for the weekend of 13-14 March 2004 to try out the new modes.

SPECIAL STATION AT THE TSHWANE UNIVERSITY OF TECHNOLOGY SCIENCE EXPO

Magalies Radio Amateur Club will from 15 to 19 March be operating an amateur radio station at the Science Expo of the Tshwane University of Technology. The station will be on the air daily from 09:00 till 17:00 and will also be an Educational event so that children will be able to participate. The following modes of operation will be activated: 1. HF SSB on the 80 and 40 metre bands; 2. Speech op 145,750 MHz and UHF 438,575 and 438,750 MHz; 3. Packet radio on 144,675 MHz; 4. Weather images on 144,700 MHz; 5. SSTV on 145,750 MHz.

ZS6MRK shall appreciate it to make contacts with all those who receive their signals.

DISCOVERING AMATEUR RADIO.

A reminder that the Muddlers Net and the Southern African Antique Wireless Association (SAAWA), in conjunction with the SARL, invite all amateurs and interested parties to a day of talks, on-the-air- demonstrations, and static displays of Amateur Radio related equipment and topics on Saturday, 20th March at the National Amateur Radio Centre OR NARC, at Radiokop, Johannesburg.

Members of SAAWA will display some of the older radio equipment.

A number of highly qualified and experienced amateurs will be presenting their latest ideas and designs at this event.

Topics will include some historical developments in radio design and current designs and construction of radios and antennas.

Of particular interest will be the theory and circuit for a noise squasher. Most amateurs suffer from ambient electronic noise in the shack, caused by switched mode power supplies. The noise squasher is capable of cancelling out these unwanted received signals.

Presentations will commence at 09:00. Soft drinks and light snacks will be available.

Details and times of future presentations shall be announced during future SARL bulletins.

Should you have any queries, please call Alan ZS6BIK at 011-678-2887 or email to zs1fg@telkomza.net.

SARL CONTESTS

The first leg of the SARL VHF/UHF Contest will take place over the weekend of 20 and 21 March, starting at 12:00 CAT on the Saturday and ending 24 hours later. Phone and CW activity on 6, 4 and 2 metres, 70 and 23 cm.

On Thursday 1 April the first 80 metre QSO Party will be on the air, starting at 19:00 CAT. This is a phone only contest.

On Sunday 11 April the SARL HAMNET 40 metre Simulated Emergency Contest will run from 14:00 to 16:00 CAT.

The rules for all these contests are available on the SARL website at www.sarl.org.za. There is also contest software available for the VHF/UHF Contest on the website.

PEARS NATIONAL VHF/UHF CONTEST

Many of the logs for the abovementioned contest are still being awaited by the contest committee at the Port Elizabeth Amateur Radio Society.

Unfortunately, the address at the PEARS website, to which several contestants have tried to send their logs, is not able to accept the messages. All who wish to send in their logs should please address them to glaaks@iafrica.com and they will be passed to the correct people.

The closing date has been extended in the meantime, and PEARS hopes there will be many new logs coming in.

NEW COMITEE

At the AGM of ZS1OAR Overberg Amateur Radio Club held on 6 March 2004 the following members were elected to the committee: ZS1WC, Johan Classen, Chairman; ZS1HK, Doepie du Plessis, Vice Chairman; ZS1AIJ, Arthur Jordaan, Secretary; ZS1SR, Kosie Smit, Treasurer; ZR1ADR, John Samuels, Add member; ZS1UH, Pieter Jacobs, Technical Consultant; ZS1TGH, Tim Hewitt, BBS Manager; ZR1AM, Andre Meintjes, Editor Radio Overberg.

Many thanks to the members of the previous committee for the work done and strength to the new committee for what lies ahead. May it be a prosperous term of service and it is trusted that all club members will actively support all the good things undertaken on behalf of amateur radio.

SOLAR ACTIVITY

Tad Cook, K7RA, of Seattle, Washington, reported that propagation should be good for the ARRL International DX Contest (SSB). Geomagnetic conditions are expected to be quiet, with predicted planetary A index at 10 for Friday, March 5, and just 8 for the following three days. Solar flux is expected to rise to 105 for Friday and 110 for the following three days. Solar flux is currently expected to stay above 100 until March 17.

Average daily sunspot numbers for the past week were up nearly 15 points to 76,9, compared to the earlier week, and average daily solar flux increased more than 5 points. Geomagnetic indices were about double this week over last. A solar wind stream caused this, but no geomagnetic storm erupted. Around March 10-11, Earth should enter another solar wind, and this could cause a geomagnetic storm, possibly lasting until March 12.

This item was condensed from the ARRL newsletter.

ACTIVITIES IN WHICH TO PARTICIPATE

15 to 19 March - ZS6MRK special station; 20 to 21 March - The VHF/UHF contest; 20 March - Discover amateur radio at the NARS; Thursday 01 April the first 80-metre QSO Party at 19:00 CAT; Sunday 11 April the SARL HAMNET 40-Metre Simulated Emergency Contest from 14:00 to 16:00 CAT.

The SARL invites you to listen to Amateur Radio Mirror International on 17 815, 9 750, and 7 082 kHz and 145,625 MHz in East London, 145,650 in Durban 145,750 MHz in Pretoria and 438,800 in the Sandton area. A repeat broadcast can be heard on Mondays at 21:00 CAT on 3 215 kHz.

Telkom and Sentech sponsor ARMI.

This then brings us to the end of today's bulletin, which was compiled by Gustav, ZS6BWN, and read byfrom..... as a service to radio amateurs, short wave listeners and electronic enthusiasts.

You have been listening to ZS6SRL and thank you for having joined us. Also many thanks to those persons who supply news for our bulletins and the amateurs who relay the bulletins so regularly.

Goodbye everyone.

/EX